

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-33. (Canceled).

34. (New) A dynamometer element, comprising:

a bolt on which the diaphragm is mounted;

a sleeve to which an outer area of the diaphragm is connected, and to which a force component to be measured is applied perpendicularly to a longitudinal axis of the bolt, the sleeve being spaced from the bolt such that the diaphragm is strained as a function of the force component; and

a sensor system for measuring the strain, the sensor system being arranged on the diaphragm.

35. (New) The dynamometer element of claim 34, wherein a one-piece component includes the bolt, diaphragm, and sleeve.

36. (New) The dynamometer element of claim 34, wherein the dynamometer element forms a screw.

37. (New) The dynamometer element of claim 34, wherein the sensor system includes strain gauges for measuring the strain.

38. (New) The dynamometer element of claim 34, wherein the sensor system includes piezoresistive elements for measuring the strain.

39. (New) The dynamometer element of claim 34, wherein the sensor system is applied using thin-film technology.

40. (New) The dynamometer element of claim 34, wherein the sensor system includes a Wheatstone bridge circuit.

41. (New) The dynamometer element of claim 40, wherein the Wheatstone bridge has two resistors in an area under compressive stress and two further resistors in an area under tensile stress.

42. (New) The dynamometer element of claim 40, wherein the Wheatstone bridge has a first resistor in an area under compressive stress, a second resistor in an area under tensile stress, and two further resistors in a low-strain area.

43. (New) The dynamometer element of claim 34, further comprising:
a rocker for introducing the force component.

44. (New) The dynamometer element of claim 43, wherein the rocker includes a ball socket for decoupling moments.

45. (New) The dynamometer element of claim 34, further comprising:
a spacer ring arranged on the bolt for limiting the force.

46. (New) The dynamometer element of claim 34, wherein at least one joint is provided in the dynamometer element for connection.

47. (New) The dynamometer element of claim 46, wherein the at least one joint includes a first joint connecting the diaphragm to the sleeve and a second joint connecting the diaphragm to the bolt, and the first and second joints are offset from each other with respect to the longitudinal axis of the bolt.

48. (New) The dynamometer element of claim 34, wherein the diaphragm includes inward-pointing free spaces which define strain-sensitive areas.

49. (New) The dynamometer element of claim 48, wherein the free spaces are circular recesses.

50. (New) The dynamometer element of claim 48, wherein each of the recesses includes a respective first circle segment terminating at the sleeve and a second circle segment terminating at the bolt, and wherein the first and second circle segments are configured differently.

51. (New) The dynamometer element of claim 50, wherein the first circle segment has a smaller radius than the second circle segment.

52. (New) The dynamometer element of claim 50, wherein the circle segments have a parabolic or spline shape.

53. (New) The dynamometer element of claim 34, wherein annularly shaped joints connect the diaphragm to the sleeve and to the bolt, the diaphragm having an annular shape.

54. (New) The dynamometer element of claim 34, wherein the diaphragm is made of a high-strength steel.

55. (New) The dynamometer element of claim 34, wherein the dynamometer element is substantially axially symmetric.

56. (New) A dynamometer element, comprising:
a bolt on which the diaphragm is mounted;
a sleeve to which an outer area of the diaphragm is connected, and to which a force component to be measured is applied perpendicularly to a longitudinal axis of the bolt, a space separates the sleeve from the bolt, the application of the force component reducing the space and thereby straining the diaphragm; and
a sensor system for measuring the strain, the sensor system being arranged on the diaphragm.